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Education

2017-present | Medical student and PhD candidate (MD/PhD program) | Supervisor: Prof. Jonathan Leor | Tamman Cardiovascular Research Institute, Sheba Medical Center, Ramat Gan, and Neufeld Cardiac Research Institute, Tel Aviv University, Tel Aviv, Israel

2017-2020 | MSc | School of Graduate Studies, Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

2014-2017 | BMedSc | Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Employment

2024-present | Medical intern | Galilee Medical Center, Nahariya, Israel

2021-present | Medical analyst | Navina Technologies LTD, Tel Aviv, Israel

2023 | Physician assistant | Department of Internal Medicine A, Sheba Medical Center, Ramat Gan, Israel

2020-2021 | Research assistant | Tamman Cardiovascular Research Institute, Sheba Medical Center, Ramat Gan, Israel

Research grants

2018 | Seymour Fefer Grant for Cardiovascular Research | Sheba Medical Center, Ramat Gan, Israel

Publications

Schary Y, Rotem I, Caller T, **Lewis N**, Shaihov-Teper O, Brzezinski RY, Lendengolts D, Raanani E, Sternik L, Naftali-Shani N, Leor J. *CRISPR-Cas9 editing of TLR4 to improve the outcome of cardiac cell therapy*. Scientific Reports. 2023 Mar 18;13(1):4481. doi: 10.1038/s41598-023-31286-4.

Rotem I, Konfino T, Caller T, Schary Y, Shaihov-Teper O, Palevski D, **Lewis N**, Lendengolts D, Naftali-Shani N, Leor J. *Osteopontin promotes infarct repair*. Basic Research in Cardiology. 2022 Oct 14;117(1):51. doi: 10.1007/s00395-022-00957-0.

Shaihov-Teper O, Ram E, Ballan N, Brzezinski RY, Naftali-Shani N, Masoud R, Ziv T, **Lewis N**, Schary Y, Levin-Kotler L, Volvovitch D, Zuroff EM, Amunts S, Regev-Rudzki N, Sternik L, Raanani E, Gepstein L, Leor J. *Extracellular Vesicles from Epicardial Fat Facilitate Atrial Fibrillation*. Circulation. 2021;CIRCULATIONAHA.120.052009. doi:10.1161/CIRCULATIONAHA.120.052009.

Brzezinski RY, Rabin N, **Lewis N**, Peled R, Kerpel A, Tsur AM, Gendelman O, Naftali-Shani N, Gringauz I, Aviv T, Amital H, Leibowitz A, Mayan H, Ben-Zvi I, Heller E, Shechtman L, Rogovski O, Shenhar-Tsarfaty S, Konen E, Marom EM, Ironi A, Rahav G, Zimmer Y, Grossman E, Ovadia-Blechman Z, Leor J, Hoffer O. *Automated processing of thermal imaging to detect COVID-19*. Scientific Reports. 2021 Sep 1;11(1):17489. doi: 10.1038/s41598-021-96900-9.

Brzezinski RY, Levin-Kotler L, Rabin N, Ovadia-Blechman Z, Zimmer Y, Sternfeld A, Finchelman JM, Younis R, **Lewis N**, Teper-Shaihov O, Naftali-Shani N, Balint-Lahat N, Safran M, Ben-Ari Z, Grossman E, Leor J, Hoffer O. *Automated thermal imaging for the detection of fatty liver disease*. Scientific Reports. 2020;10:155532. doi:10.1038/s41598-020-72433-5.

Brzezinski RY, Ovadia-Blechman Z, **Lewis N**, Rabin N, Zimmer Y, Levin-Kotler L, Teper-Shaihov O, Naftali-Shani N, Tsoref O, Grossman E, Leor J, Hoffer O. *Non-invasive thermal imaging of cardiac remodeling in mice*. Biomedical Optics Express. 2019;10:6189. doi:10.1364/BOE.10.006189.

Presentations

Lewis N, Milošević N, Shah SA, Tsoref O, Epstein FH, David A, Leor J. *Targeting E-selectin to ameliorate cardiac fibrosis and diastolic dysfunction in a mouse model of heart failure with preserved ejection fraction*. Oral presentation at the 67th Annual Conference of the Israel Heart Society, Tel Aviv, Israel. 20 October 2020.

Lewis N, Naftali-Shani N, David A, Epstein FH, Leor J. *A mouse model for heart failure with preserved ejection fraction*. Poster presentation at the Cardiovascular & Thoracic Center Research Day, Sheba Medical Center, Ramat Gan, Israel. 17 September 2020.

Lewis N, Milošević N, Tsoref O, Epstein FH, David A, Leor J. *E-selectin targeted copolymer as potential therapy for cardiac fibrosis in mice*. Poster presentation at the 9th Annual ILANIT/FISEB Conference, Eilat, Israel. 18 February 2020.

Lewis N, Milošević N, Tsoref O, Epstein FH, David A, Leor J. *E-selectin targeted copolymer as potential therapy for cardiac fibrosis in mice*. Poster presentation at the Cardiovascular & Thoracic Center Research Day, Sheba Medical Center, Ramat Gan, Israel. 19 September 2019.

First prize, Best Poster (Basic Science).

Lewis N, Milošević N, Tsoref O, Epstein FH, David A, Leor J. *E-selectin targeted copolymer reduces cardiac fibrosis in a mouse model of heart failure with preserved ejection fraction*. Poster presentation at the Annual Meeting of the International Society for Heart Research – Israeli Subsection, Haifa, Israel. 30 May 2019.